

A "Forgotten" Bronze Ship and a Recently Discovered Bronze Weaver from Eastern Indonesia:

A PROBLEM PAPER

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MARIE JEANNE ADAMS

DURING MY recent travels in eastern Indonesia, I encountered a previously unreported small bronze figure of exceptional artistic and historical interest.¹ About 11 inches in height and of a dark brown color, it depicts a woman seated at a small loom with an infant nursing at her breast (Plate I). The figure is hollow and there are small holes at several places on the body. This bronze work is in the possession of a family living in a hamlet on the island of Flores in eastern Indonesia. Under the circumstances all the information I could obtain was that the bronze is prized as an heirloom. Its exceptional interest for us stems not only from its subject matter, a rare one in Southeast Asian art, but also from the use of a lasting material and a complex technique, evidently copper-alloy cast in one piece in a one-of-a-kind mould, probably by the lost-wax method.²

Marie Jeanne Adams is Associate Professor of Art and Anthropology at Harvard University. Unless otherwise noted, photographs accompanying this article are by the author.

¹ This is an abridged version of a paper delivered as a Problem Seminar at the University Seminars on Primitive and Pre-Columbian Art, Columbia University, April 1972. In using the word bronze for the two objects discussed in this paper, I rely on the breadth of the dictionary definition that includes "material that looks like bronze," for the alloy content of these figures is not known. The approximate measurements for the bronze weaver are as follows: height 11", width at base in back 4", leg length 9", width at skirt edge $3\frac{1}{2}$ ", and for the ship as follows: length 24", height $4\frac{3}{4}$ ", width $3\frac{1}{8}$ ". Locations on Flores are not specified in an effort to protect the objects now in local possession.

² The well-known technique of lost-wax casting involves the shaping in metal of an object originally modelled in a material such as beeswax. For making a hollow figure, the following procedures are common. (For discussion and diagram, see Hodges 1970: 150-151). First the artisan forms in clay the approximate figure he wishes to produce. Above that clay core, he moulds the

Subject and style place the figure outside the well-known metal art traditions of Indonesia, that is, those dating from the 8th to the 15th centuries A.D. of the Hindu-Buddhist era. On this point, the weaver joins the company of a bronze ship model (Plate VI) approximately 20 inches in length, that was found in another district in Flores 50 years ago (Sevink 1914) and again 30 years ago (Vroklage 1940a), where it served on occasion as an offering place just outside the village. Covered with a pale-green patina and showing signs of severe damage in its superstructure, the bronze ship bears persons who seem to be crew members, warriors, and passengers.

Primary questions such as whether these objects were made on Flores and when they were cast are difficult to answer. Ethnographic reports of the past 100 years (which I will refer to as the ethnographic era) indicate that casting in brass was an important means of producing ritual ornaments in central Flores (Vroklage 1940b). The emphasis on the practice of brass casting in Flores was considerably greater than on islands nearby, such as Timor and Sumba, where silver and gold jewelry were respectively favored. The Florinese, like other peoples of eastern Indonesia, obtained their supply of brass (mixture of copper and zinc) in the form of alloy rods ready for casting from the seafaring traders of Makassar on Sulawesi, a large island north of Flores. Using lost-wax casting techniques, craftsmen made a variety of small ritual ornaments, rarely larger than a hand in size (Plate IIa; also see numerous illustrations in Vroklage 1940b). Nothing in the quality or complexity of this tradition of small works suggests a command of casting skills equal to the weaver figure.

In the ethnographic era, the peoples of eastern Flores and Alor, a small island to the east, were noted for the high value they placed on an hourglass-shaped brass drum and ritual object (20 to 30 inches in height) called the *mokko*, which played an important part in bridewealth and gift exchanges (Fig. 1). Collected examples show various casting procedures: some are cast in one piece, others in two vertical halves; still others in three horizontal sections and soldered (Huyser 1931-32). This variation indicates the difficulties in assigning a workshop source for these works. However, a number of the *mokko* display motifs such as a monster head or leaf

precise form desired in wax. The next step is to insert on that form other pieces of wax (rods called runners) which during the subsequent heating process will melt, permitting the flow of metal into the various parts of the mould and the escape of the gases generated inside the mould. After the form and the runners are complete, the artisan slowly builds up over all parts of the wax-form outer layers of clay (called the investment). Since the ultimate aim is to melt out the wax layer and allow the molten metal to occupy the space once assumed by the wax, there must be some way of maintaining the space between the inner core and the outer investment. To fix the position of the two clay masses in relation to each other, small, usually metal rods (called chapelets) are inserted which extend from the outer mould to the inner clay core. The artisan also forms a pouring channel (sprue) through the outer clay investment to the wax layer. He heats the entire assembly in order to melt or burn out the wax and harden the clay. He then pours molten metal into the sprue channel, filling up the passages left vacant by the melted wax. As the metal cools, it solidifies in the precise shape and thickness of the original wax layer. The artisan then breaks away the outer cover of hardened clay and as much of the interior core as desired. He removes the runners and the chapelets from the casting and covers those holes with metal patches. On the bronze weaver one can see the outlines of small rectangular patches that indicate the former position of the chapelets; a few of the patches have disappeared leaving more or less irregular holes on the surface.



Plate Ia Woman holding small bronze figure of weaver nursing an infant. Flores, Indonesia. (Photograph: David Stuart-Fox.)



B

Plate Ib Closeup, three-quarter view of bronze figure of woman seated at a foot-braced loom, with infant held in her arms. Note braided hair and circular extended earlobes, necklets and, on the loom, a patterned textile which includes chevrons and lozenges.



Plate Ic Back view showing braided hair style and plaited backstrap of loom.



Plate IIa Man in dance costume, wearing brass ornament hanging at his back, just below the waist. Lio, Flores. (Photograph: Netherlands Press Service, 1938.)



Plate IIb Elephant in two parts made of thin brass, said to have been brought by traders from Makassar. Flowing plant-like motifs are characteristic of Javanese artwork. Located on Flores, Indonesia, 1970.

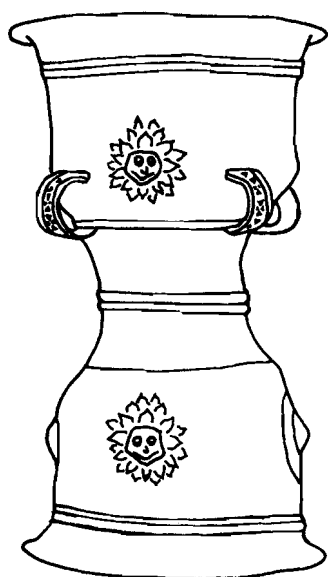


Fig. 1 Sketch of the cast drum-shaped bronze, *mokko*, used as an object of wealth on Flores.

arabesque typical of East Javanese style traditions, and it is likely that some were cast on Java (Vroklage 1941). Decorative details belonging to Javanese traditions also identify the thinly cast, mould-made brass elephant (Plate IIb) that I found in the same community on Flores as the weaver figure. In the opinion of local informants the elephant had been brought long ago by traders from Makassar.

Copper-alloy objects of other kinds reported for the central region of Flores (Verhoeven 1954) appear to be imports distant in time; a bronze dagger collected from a man who valued it as an heirloom and several socketed axeheads found at a grave site. Identifying the socketed axeheads as similar to early Javanese types, Heine-Geldern (1954) agreed with van Heekeren's view that these objects belong to a tradition of metalwork once widespread in Southeast Asia, which they associated with Dong-son, an archaeological site in northern Vietnam.³

Obviously with this background of Florinese interest in copper-alloy objects, local traditions should be investigated as a possible source for the bronze figures. However, at present, lacking stratigraphic location, associated finds, or a clear

³ One of the objects considered typical of this archaeological tradition is a mould-made bronze drum of a peculiar curving outline, usually referred to as Heger I (after Heger's classification of types). By 1960 these drums had been recovered at two sites that by virtue of associated finds yield approximate dates for burial of the examples: Dong-son, the 1st century A.D. (Janse 1936), and Stone Fortress Hill (Shih-chai Shan) in Yunnan Province of South China, the Western Han period, 206 B.C. to A.D. 9 (Bunker 1972, von Dewall 1967). At one site in Malaysia, a wooden plank underlying drum fragments of the figured type yielded C-14 dating of the 5th century B.C. (disturbance at the site and lack of other datable references suggest this dating is problematic) (Peacock 1965). Although surface finds of Heger I drums are reported for a number of Indonesian islands, including Sumbawa, the island west of Flores (Sukarto 1973: Plate III); none have been found on Flores.

relationship to local products, no answers to our initial questions are provided by the findspots of the weaver and the ship bronze on Flores.

Stylistic parallels in copper-alloy figural work of the other islands could provide dating clues but, in terms of total configuration, these two Flores images do not accord with the corpus of figurative bronze or brass work known from the rest of Indonesia. A few examples will illustrate this point. Most figural bronzes of Indonesian provenience belong to well-known Hindu-Buddhist traditions and can be dated by inscription or by style and religious iconography between the 8th and the 15th centuries. A number of bronze figures deviate from standard Hindu or Buddhist formulas but retain sufficient formal features for approximate dating (see Christie 1961: 284, Fig. 19). The volumetric character and naturalism of execution identifies even simple forms such as the two small standing figures illustrated in Bernet Kempers (1959: Plates 292, 293; heights $7\frac{3}{4}$ " and $8\frac{1}{2}$ ") as being of the Javanese period.

Finds in the ethnographic era, either collected casually or recovered from heirloom or ritual caches, include a number of small (under 10 inches) human figures cast in copper-alloy. They are difficult to identify and therefore uncertain in date because they fall outside the recognized canons of Javanese style; examples from eastern Indonesia include Flores (see Fig. 2 and others on finger rings in Vroklage 1940b: Plate II) and Timor (National Museum, Jakarta, no. 27251 a and b, Exhibition Hall).⁴ At the most obvious level of shapes, posture, and character of the forms, one can say unhesitatingly that all these objects are unlike the weaver and the ship in style.



Fig. 2 Sketch of tiny figure in copper alloy from Lio, Flores (Vroklage 1940b: 20, Plate 2).

If the formal features of the metal arts do not help to identify the two bronzes, how do the motifs, weaver and ship, represented in these unusual metal works fit into the artistic and cultural traditions of Indonesia as we know them from the ethnographic record? In exploring data in search of an answer, my aim is to arouse scholarly interest in these figures and to stimulate technical and further art historical

⁴ Examples from the western regions of the archipelago can be seen in an article by Tom Harrisson (1965: Figs. 1-4), from the Kayan in Sarawak, and in Bernet Kempers (1959: Plate 8), showing several figures from $3\frac{11}{16}$ " to $1\frac{3}{4}$ " high from Bankinang, Sumatra. On the latter figures Christie (1961) concurs that these small forms stem from the Dong-son tradition. Examples from the western regions show more natural, rounded shapes and more careful attention to decorative detail than eastern finds.

investigations so that eventually it will be possible perhaps to place these objects in the history of Indonesian or Southeast Asian art.

THE BRONZE WEAVER NURSING A CHILD: THE LOOM

The scene (Plate 1b) corresponds to the small-village traditions of Indonesia where weaving is a widely practiced craft. Typically in small villages one may, in proper season, see a woman tending an infant while sitting at a handloom.

The loom depicted belongs to the two-bar frameless type, often referred to as a backstrap loom. In this type, the weaver sits within the loom mechanism, enclosed by lateral cords attached to a loom bar in front of her and to a board or strap across her back (note Plate 1c). In this arrangement, the weaver's body plays a part in the loom mechanism, for she regulates the tension of the yarn strands on the loom by moving her torso back and forth during weaving.

Within the lengthwise (or warp) strands on the bronze loom, we see three rods inserted horizontally (Fig. 3). In size, shape, and placement, these rods suggest the three transverse bars used in weaving on simple backstrap looms, as follows: uppermost, the shed stick; second, the heddle (assuming there are stringed loops on this rod), and, closest to the weaver, the broader bar or "sword" used to open the passage for the crosswise (or weft) yarn and to compress the already woven part by beating it in (Junius Bird, personal communication, 20 September 1971; Rita Bolland, personal communications, 30 September and 12 October 1971; Alfred Bühler, personal communication, 8 September 1971). Certain bars of a loom are not depicted, such as laze rods, generally used in pairs to maintain the separation of alternate strands of the warp during weaving, and a spool or bobbin of weft yarn which is usually held in the weaver's hand or laid at the side of the loom. Although small raised designs are clearly evidence in the woven part of the textile on the bronze loom, there are no pattern sticks which could be used for lifting warp yarn in order to insert extra design-forming wefts. However, these supplementary wefts can be inserted by the fingers, as in the example (Plate IIIa) from Timor, a large island to the southeast of Flores.

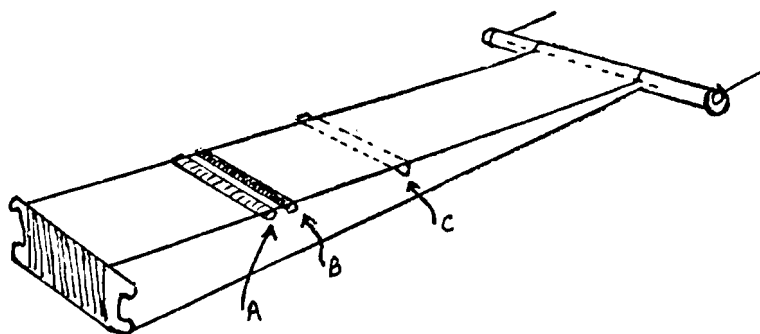


Fig. 3 Sketch of the foot-braced loom depicted in bronze showing the shed-rod (*a*), the heddle (*b*), and the beater or "sword" (*c*). (Redrawn from explanatory sketch by Junius Bird.)

Indonesian women use looms as narrow as the bronze example for making belts, panels for pouches, and headbands, and employ a similar manner of winding the

warp continuously around the two end bars of the loom (Plate IIIa). One difference in detail concerns the bar at the distant end (the warp bar) of the loom. On the bronze loom the bar is flat; in eastern Indonesia it is common practice to use a round bamboo pole for that function.

The major difference is that in Indonesian technique the distant bar is attached to posts beyond the weaver's feet as in Plate IIIa. In contrast, the warp bar of the bronze loom is supported by the weaver's feet, thus forming a foot-braced loom. (With a circular, continuous warp as on this loom, the length of the cloth to be woven is limited to twice the length of the weaver's legs.) According to my present knowledge, this method of supporting the loom is not reported in the ethnographies of Indonesia, except on the north coast of Irian Jaya (formerly New Guinea) at Sarmi (see Goslings 1928-29: 119-121, Fig. 13) and on small islands nearby.

The foot-braced loom has been reported in recent decades from the larger area of Southeast Asia, specifically among the following ethnic groups:

Angami Naga in northwest India (Kauffmann 1937: 120, Fig. 12)

Mnong Nong in Vietnam (Huard and Maurice 1938-39: 97, 99, Figs. 42, 44; other illustrations in Sochurek 1968)

Maa' in Vietnam (Boulbet 1965: Plates 21-24)

Several groups (e.g., Atayal, Bunun, Paiwan) in Formosa (Mackay 1895; see Plate IIIb here; Nevermann 1938: 178, illus.)

Li of Hainan Island (Stübel 1937: Plates 42, 154)

Melanesians of St. Matthias group of islands in the Bismarck Archipelago (Goslings 1928-29: 121 and Kaufmann 1975: Fig. 21)

This distribution shows that the foot-braced loom occurs in regions marginal to Indonesian populations. However, in most of these areas, supporting the warp bar by the feet is not an exclusive method, for the loom may also be attached to one or two posts beyond the feet as in Indonesia, a method appropriate for producing a longer cloth.

WEAVER FIGURE

To find a weaver depicted in bronze one must look outside Indonesia and to the past, specifically to the archaeological site of Stone Fortress Hill (Shih-chai Shan) in South China, an ancient burial mound assigned to the Tien kingdom which came to an end toward the last decade of the 2nd century B.C. (von Dewall 1967). Scholars consider the Tien culture linked in some way to Southeast Asian traditions because several bronze containers and drums have been recovered from the graves at Stone Fortress Hill which are similar in shape (Heger I type, see note 3) to finds (Janse 1936; Goloubew 1940) in the Dong-son area of northern Vietnam.

One bronze drum-shaped container for a treasure of cowrie shells from Tomb 1 at Stone Fortress Hill has a detachable cover supporting a number of small (approximately 4 cm or less) metal figures of women shown in various acts of weaving. They are apparently attendants in a ritual related to a larger figure of a woman seated in their midst. Each weaver is seated at a foot-braced loom fitted with

a flat warp bar (Watson 1974: 114, illus. 176; for discussion and detailed illustrations, see Vollmer 1977).

The Tien work is the only other known example of the weaver motif in the arts of Southeast Asia. In addition to differences in scale between the two instances of metal weaver figures, there is a difference in compositional concept. At Stone Fortress Hill, the weaver figures appear as part of a varied group in a realistically depicted, complex scene. The Flores bronze exists as an independent single entity, complete in itself. The two works do not exhibit correspondences in details of figural style. The varied clothing and hairdress styles of the tiny bronze weaver figurines on the bronze drum are thought (Fêng 1961) to indicate members of various ethnic groups from the tribute territories of South China. However, available illustrations of these features (Fêng 1961) do not resemble the Flores weaver.

It is more rewarding to compare costume and adornment of the bronze weaver with the ethnographic record in Southeast Asia, specifically the tubular or wrap-around skirt reaching from the waist to below the knees, the two necklets of tiny beads and the ear lobes extended by the wearing of apparently absent ornaments, all of which accord with styles of Indonesian and Southeast Asian highland dress. The most striking similarity occurs outside Indonesia, in the circular earlobes extended by thin bamboo hoops worn by the Maa', a Mon-Khmer linguistic group, in the plateau region of southern Vietnam, creating an effect identical to the bronze weaver's lobes (Boulbet 1965: Plate 19). However, the hairstyle, in which the hair is elaborated by braiding, pulled back over the skull, and hung down the back of the head in a long braid (Plate 1c), is not a typical Indonesian or Southeast Asian highlander hairdress; for these peoples, a bun at the back of the head is common. (The matron's hairstyle in Plate IIIb is problematic.) The several features of the bronze weaver's appearance *in combination* do not conform to any specific ethnic group known to me in ethnographies of Mainland or Island Southeast Asia, although further research is needed on these points.

MOTHER AND CHILD

The bronze weaver-figure incorporates another theme, mother and infant, which deserves examination. This figural combination occurs in the monumental, folk, and indigenous art traditions of Indonesia, but comparable versions of nursing mothers are not in evidence. Among the earliest images of woman with infant is a line drawing on a copper plate from Java attributed to the 8th or 9th century A.D. showing a standing female cradling an infant in her shoulder cloth (Stutterheim 1956: Fig. 23). In the reliefs of the monumental terraced stupa of Borobudur (9th century A.D.) in Central Java, the infant Buddha appears in formal presentation poses usually facing outward while seated on his father's or a woman's lap (e.g., Krom 1926: Plates 25, 30-32). A few other images in Central Java, for example, Chandi Mendut (9th century), or on later East Javanese monuments, present a more intimate view of an infant cradled in its mother's arm in which the infant's hand is on or reaching for the breast (e.g., Bernet Kempers 1959: Plate 56).

In folk art, small images in stone of a seated mother and child in a crude style have been found at now-neglected offering places in Java, possible votive figures abandoned during the spread of Islam during the 15th and 16th centuries (Tichelman

1940: 22, Fig. 3). Balinese folk sculpture includes an example in tufa of a woman in the act of nursing an infant (B. 1955: Fig. 12), but the fully rounded, deeply modulated style of this stone resists any comparison with the restrained forms of the bronze mother.

In the sculpture of small village communities in Indonesia (or highland Southeast Asia), a mother and child image is rarely reported. From the Manggarai district of West Flores, Vroklage (1939: 389-394) published a stone figure of a woman in a hunched pose, bearing a child outspread on her back; in local tradition she was identified as a mythical Mother Ambe who, ready to flee her village, had turned to stone. Two other examples that I can readily cite also depict the figures in an entirely different relationship from the bronze image on Flores. In one, a wooden carving from the Jarai of Vietnam (National Museum of Ethnology, Leiden: Exhibition Hall), the child, facing the mother, places both hands on the mother's chest (Plate IVa); in the other, a stone carving for a grave monument on the eastern Indonesian Island of Sumba, the standing mother holds the child, facing outward, in front of her body (Plate IVb). This brief survey shows that the mother and child theme is not a prominent one in the traditional art of Southeast Asia, thus emphasizing the exceptional character of the bronze motif.

STYLISTIC FEATURES

Nevertheless, a review of human images in various media suggests that, in terms of style, the weaver figure shares general formal features with figurines in the woodcarving tradition that is characteristic of small Indonesian villages. In this connection, Sarah Gill (personal communication, 18 October 1971) mentions the large head with restrained expression, oval eyes set close together, eyebrows joined at the center and continued vertically to form the nasal bridge, long and thin nose, rather abrupt chin, as well as a symmetry in all these features. The body is soft, with tubular and unarticulated limbs exhibiting no musculature; the hands and feet are small. On Flores this style is apparent in wooden figures (15 to 25 inches in height) kept in community temple-houses to which offerings are made on various occasions. In a typical example (Plate Va) from the central region, we see the restrained expression of the face, oval eyes set close together, long thin nose, and abrupt chin. (See also Vroklage 1940b: Plate II, nos. 9 and 10, and for comparison with other examples from eastern Indonesia, see Bodrogi 1972: e.g., Fig. 72.)

Nevertheless there are distinctive differences between the bronze figure and the Flores woodcarving style; in the latter (e.g., Plate Vb), the body appears solid and compact with a distinct definition of body parts, for example, in the angles of the nose, in the indication of collar bones, rib cage and sexual details (these figures are usually carefully wrapped in textile garments). The handling of the body in the bronze is more generalized, the planes modulate gradually, and the limbs are rounded so as to suggest volume. On the bronze weaver, realism is emphasized at different places from the wooden figures, not in the indications of body parts but in the decorative aspects of the figure, such as the braiding of the hair, the ear disks, necklets, and ornamented cloth. One can even distinguish decorative details such as chevrons and lozenges in the cloth on the loom.

The greatest difference between the Flores wooden sculpture and the bronze

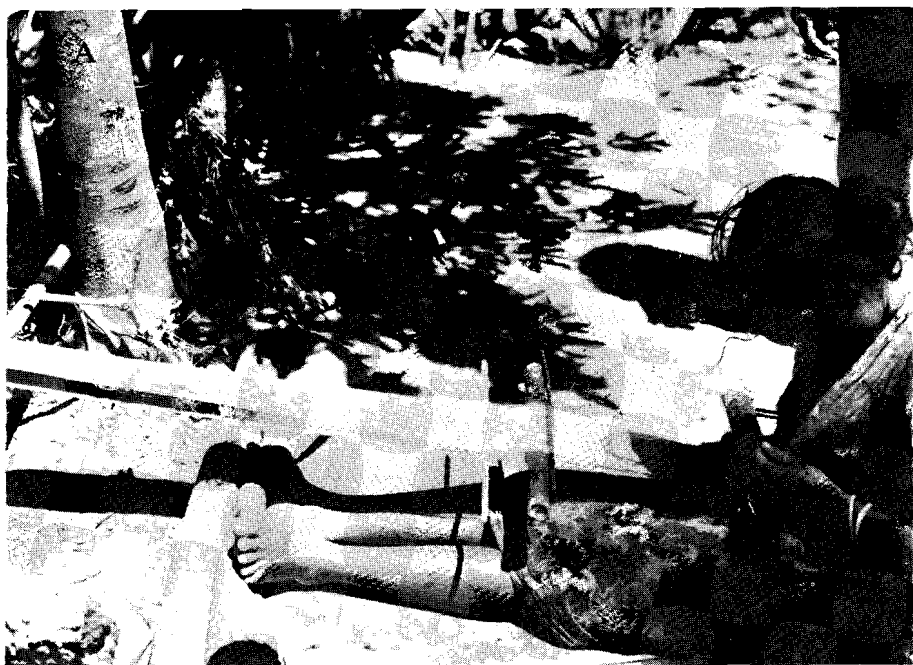
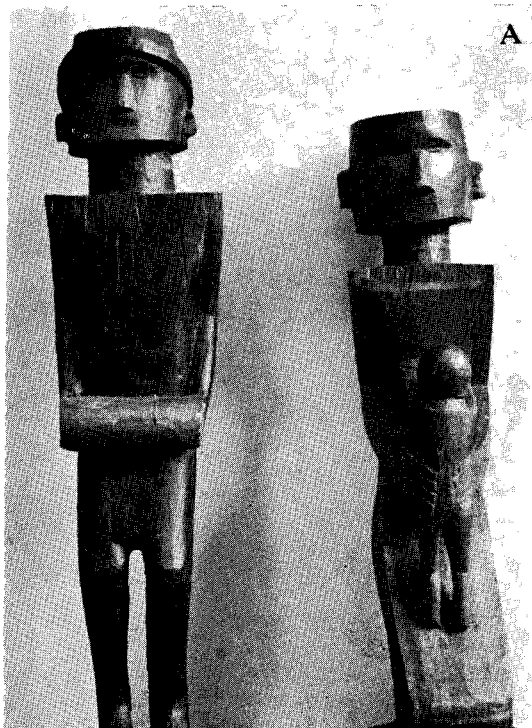


Plate IIIa Example of a narrow backstrap loom in Indonesia. The weaver is about to wrap short pieces of colored yarn with her fingers around selected strands of the warp (lengthwise yarn) in order to form designs, which will be lozenges, in the cloth. This finger work alternates with weaving which secures the decorative yarns into the cloth. Soe area, Central Timor, Indonesia.



Plate IIIb Weaver at foot-braced backstrap loom. Matron in mission school. North Formosa. (Mackay, 1895: op. 306.)



A Plate IVa Male and female figures carved in wood from the Jarai, a highland people of Vietnam. National Museum of Ethnology, Leiden.



Plate IVb Carved pillars on stone monument, commemorative of dead nobleman, showing a woman holding a child facing outward in front of her. Natangu village, Kapunduku, E. Sumba, Indonesia. Photograph: Rev. Lambooy.

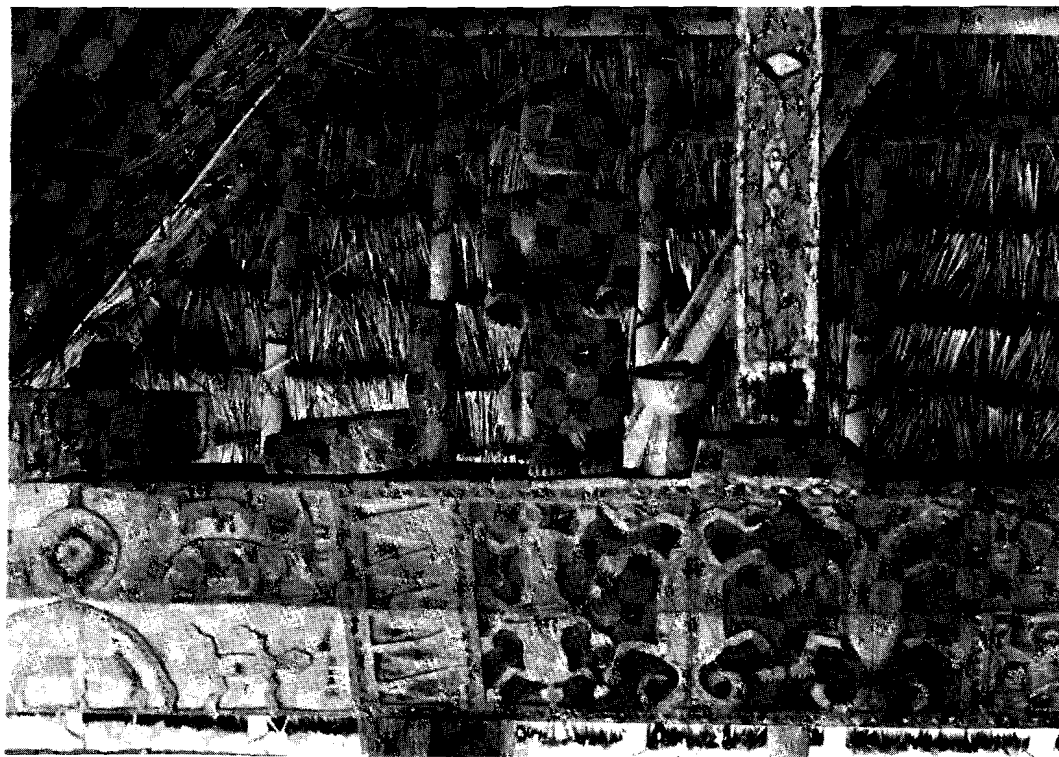


Plate Va Woodcarving of male figure standing on a ledge in a community house-temple, usually accompanied by a female figure. Lio district, Central Flores.

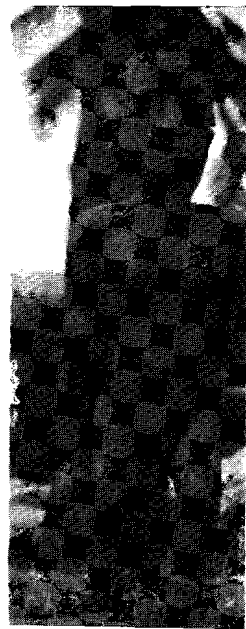


Plate Vb Female figure carved in wood (unwrapped from its garments and removed from the temple for photographing. It is being held by the back of the head). Note distinct articulation of body parts. Lio district of Central Flores. Photograph: David Stuart-Fox.

Plate VIa Bronze ship, twenty-four inches in length, bearing several figures possibly representing paddlers, warriors and, inside the ship, four passengers. Superstructures at bow and at center show severe damage. Flores, Indonesia.

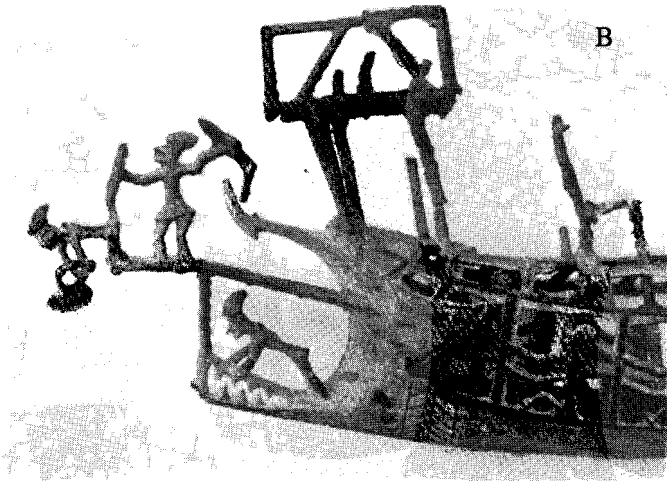
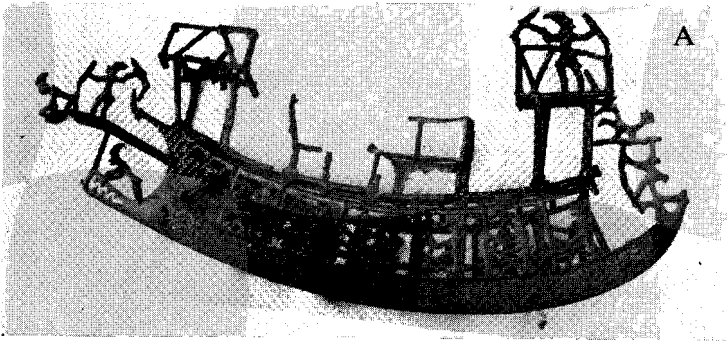


Plate VIb Bow of bronze ship from Flores, showing hull terminating as crocodile (?) mouth, three human figures. The forward and center deck castles are damaged. At the near side of the canoe one of the six seated men can be seen. Note details such as raised linear designs and holes in the body of the ship and, along the edges of the superstructure, irregular jutting ridges, possibly casting "fins."

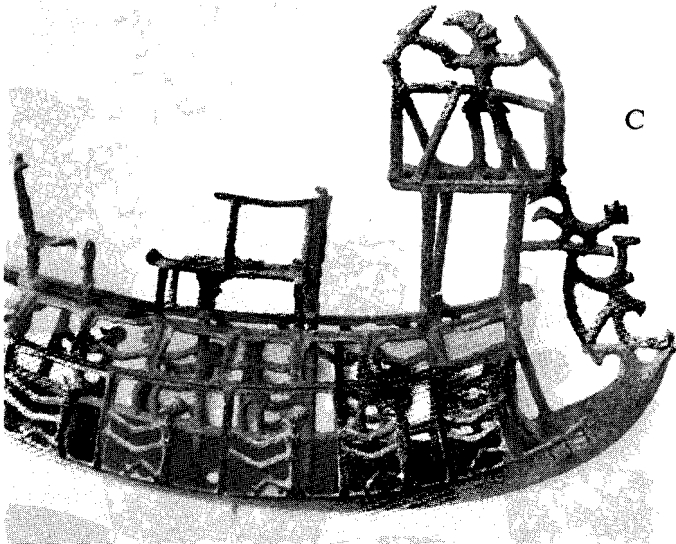


Plate VIc Stern of bronze ship.

weaver lies in the kind of activity represented. The weaver is readily recognizable at her tasks while to the outside observer, the typical wooden figure appears enigmatic in pose and expression, suggesting that it relates to specialized local contexts of ritual action. In sum, it is difficult to see the bronze figure originating in the local style traditions of the ethnographic period.

THE WEAVER WITH NURSING CHILD AS A MEANINGFUL UNIT

One final important point for consideration is the subject matter of the bronze, a weaver with nursing child. In looking at the somber authority of the weaver's expression, it is difficult to dismiss this work as a quaint genre study or slice of village life. Further, the raised designs on the bronze loom clearly show that the mother is weaving a decorated textile. The importance of decorated textiles in traditional Indonesian cultures, as ceremonial costume, as wealth in ritualized gift exchange, and as sacred objects in themselves (hangings, banner, ritual cloths) also suggests that we should consider an intent more meaningful than homely illusion.

Not only does the ritual use of decorated textiles mark every social stage of an individual's life in some traditional Indonesian societies, but textiles also hold an important symbolic position in the conceptual order of society. In many areas of Indonesia effective social unity is seen as a combination of contrasting but complementary elements characterized as masculine and feminine which are in turn symbolized, respectively, by metal and textile objects (Jager Gerlings 1952).

The tasks of men, chiefly the organization and defense of the community, are symbolized by their metal ornaments and weapons while the characteristic work of women, who also share other essential economic pursuits, is to produce textiles. The marriage of prominent persons, representing agreements of major social and political consequence for a number of social groups, rests on the exchange of symbolic gifts. Gifts considered "masculine" in character, that is, weapons or metal ornaments, must be given by the groom's side in return for textiles, the "feminine" counter gift, from the bride's party. The exchange serves as a contractual agreement between the parties. Textiles are viewed explicitly as a symbol of the feminine element in the community.

The bronze, however, depicts not simply a textile but the process of making a decorated one. Or more exactly, we see that the mother is engaged both in weaving a decorated cloth and in nursing a child.

Here I would like to comment on this total configuration by referring to symbolic aspects of textile work on the neighboring island of Sumba, where social values, religious system, and life patterns are similar in many ways to those of Flores and where the people employ the same techniques of textile decoration as on Flores. On Sumba, the successive steps of making and decorating textiles are consistently linked to the progressive stages of human life development.

The metaphoric parallel begins with the mud of the rainy season in which cotton is planted. The mud, viewed as a combination of masculine rain and feminine soil, symbolizes human conception. The resulting fetus is likened to a ball of raw fluff produced by the cotton plant, as in the story of the birth of the Creator Deity of the Kapunduk district when, as a clot of uterine blood, he drops from his mother's body into a cotton field. After being picked up and wrapped in a ball of raw cotton, he is

placed in a sacred gong and nurtured by its constant beating, just as, after harvest, the sounds of the beating of raw cotton resound throughout the small valleys in the dry season. Subsequent spinning and winding are the common tasks of mothers and their small children.

The next step, the tying-in of the designs and the blue dyeing process, parallels the stage of acquiring the arts of maturity and becoming nubile. Marriage and its complex arrangements are comparable to the "setting up of the loom" which on the backstrap type used on Sumba, chiefly means the installation of a stringed bar or heddle whose operations assist the union of warp and weft that produces a cloth. On Sumba, the negotiator for a marriage is called *wunangu*, also the word for heddle. Death is comparable to the completion and cutting of the finite cloth, for decorated textiles are finally used as shrouds and grave gifts. (For more detailed discussion, see Adams 1971.)

Viewed in the light of these associations on Sumba the configuration of a bronze weaver nursing a child takes on a coherent and serious character. The weaver and child unit may convey a metaphor in which the painstaking and disciplined work of producing a fine textile serves as a parallel task to the proper nurture of human life. Just as the weaver is enclosed in the circle of the loom, so the mother encloses the child in her arms, together forming a mutual metaphor of woman's socially productive role. (In the University Seminar discussion, Douglas Fraser raised the question, in the light of this metaphor, at what stage of completion was the cloth shown on the loom? The mother, shown as a young adult, seems to have completed almost half the entire cloth.)

These comments are not meant to assign a definitive interpretation to the figure nor to claim a specific provenience for its manufacture. In view of the widespread significance of textile work in Indonesia there are possibly a number of localities in which this visual metaphor could appropriately serve, its realization dependent on the hand of a skilled and perceptive artist. Consideration of this metaphor drawn from the ethnographic period data enriches the potential meaning of the bronze figure and suggests its importance as a focus for further research.

THE BRONZE SHIP: DESCRIPTION

In contrast to the compact visual unity of the weaver figure, the bronze ship (Plate VIa) presents a varied scene which includes a number of human actors engaged in diverse activities. At the prow (Plate VIb), three human figures can be seen, one leaning over the terminal of the hull, figured as a long, toothed mouth; one holding a large stone anchor; another standing, armed, on a platform extending from the bow. The armed figure wears a short skirt and holds a shield and weapon, possibly a double-headed axe, in his extended arm (Fig. 4a). At each side of the canoe, behind what appears to be a washboard at the bow, six seated figures face forward, each grasping in both hands an upright post before him.

Three stilt platforms or deck castles rise from the upper level of the deck framework. Through damage the forward castle is misshapen but its remnants, including the lower parts of two legs resembling the warrior's, lead me to suggest that formerly the platform supported an armed figure similar to the warrior at the bow. At midships only fragments of a longer platform-structure remain. The least damaged

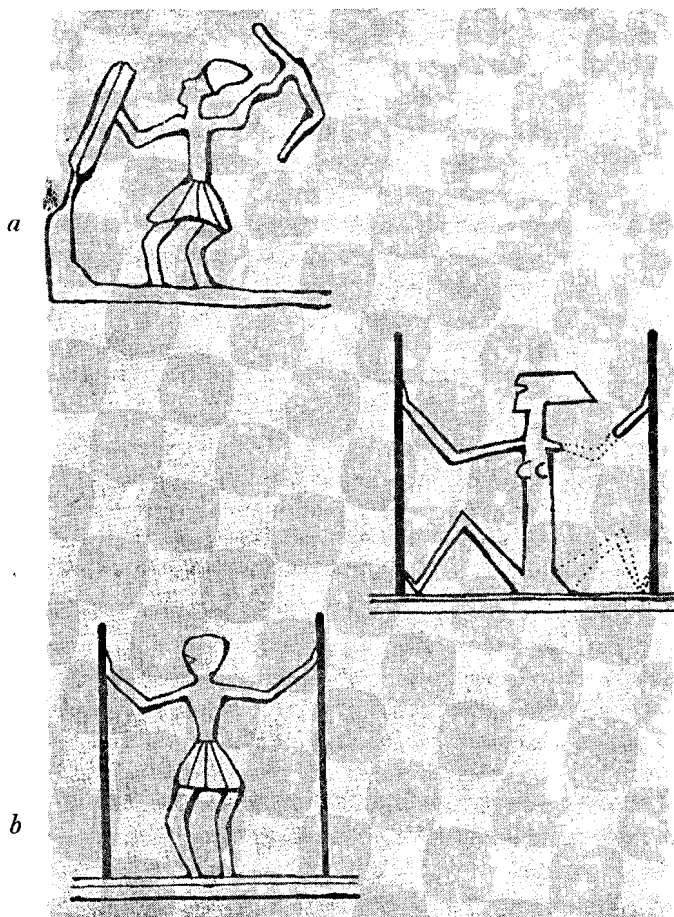


Fig. 4 Drawings, schematic versions of sketches made at the site. *a*, figure of the type at bow and stern with extended arms bearing oblong shield and weapon, possibly a double-headed battle axe, the lower end of which droops; *b*, figure with arms outstretched typical of the three standing in a row on a bar inside the canoe; *c*, single female figure seated on interior bar at bow section with arms outstretched and knees bent. Dotted lines indicate surmised missing parts. Artist: Becky Nemser.

deck castle, a high one at the stern (Plate VIc), support an armed man carrying a shield and a weapon and standing in a pose similar to that of the other warrior.

In general type, the ship resembles the canoes and the canoe-derivatives of peninsular and Island Southeast Asia. As Müller-Wismar (1912) has shown in a careful survey, the bifurcate prow is a widespread characteristic of Indonesian and Oceanic ships. The bronze ship exhibits this feature in the two structural projections from the hull at the front edge of the boat, the upper one an ambiguous curving form, the lower one a long, toothed mouth resembling a crocodile snout (Plate VIb). Representations of the hull as an open-mouthed creature occur on other Southeast Asian boats. The bound-stone anchor is another feature familiar in Southeast Asian waters.

At the tip of the stern a few curved rods support a bar on which a cock stands. After examining a photograph of the ship, Joseph Needham, authority on ancient Asian technologies, suggests (personal communication, 10 November 1971) that these curved rods refer to a steersman managing a steering sweep, a unit which has either broken off partially or was originally only hinted at (Plate VIc).

Perhaps the most interesting feature, not mentioned in an earlier report (Vroklage 1940a), is the inner group of passengers. Inside the canoe, on a bar parallel to and slightly higher than the outer edges of the boat, there are four figures facing the bow, three standing with outstretched arms in slightly off-center poses (Fig. 4b) and at the bow end, one seated nude woman (Fig. 4c). Her arms are extended and the right arm is broken in two but complete. If one leg is missing as it seems to be, her legs were parted, thus displaying her body. This displayed pose recurs in the visual style of various Indonesian islands; it is perhaps best known in examples of beadwork and painted shields from Kalimantan.

Another contrast between the ship and the bronze weaver lies in formal style. The ship scene is constructed of multiple linear forms in an openwork arrangement; the level of depiction is blunt and summary. The human figures are dwarfed in proportion to the ship. Details convey basic information on weapons, clothing, and tasks, but lack the careful definition and decorative details of the weaver figure.

Although the role-identity of the passengers is unclear, the seated figures facing the bow along the outer edges of the boat are likely to be paddlers, because rowers in Southeast Asia, as in Europe, generally face the stern. In Chinese (raft-derivative) craft, men face forward to row but in action they characteristically stand or kneel, a method depicted on ancient bronzes of South China and still practiced on lakes of Formosa and Yunnan.⁵

We might consider that these seated men are not concerned with propulsion by means of paddles but are engaged in ritual action. Mattiebelle Gittinger (personal communication) suggests they could be holding posts for banners which have since disappeared. Illustrations of banner-holders on ships appear across a broad range of time in Southeast Asian art. In scenes on several bronze drums (Heger I type) collected in Laos and Vietnam and assigned to the aforementioned Dong-son tradition, men on ships carry posts decorated at the upper end with what appear to be feathers (Goloubew 1929, 1940). The motif unit of ship with feather banners recurs in modern Timor, near Flores; in the Insana district there are images made of flattened horn in the shape of a ship with a bifid prow (Plate VIIa) bearing a row of upright posts, which form part of a headdress for dancers at funeral ceremonies. When worn, brightly colored feathered are bound to the upright posts (Plate VIIb). Bird feathers may indicate a symbolic form of propulsion (by virtue of ritual action), the feathers providing a metaphor for the prosaic human effort of paddling.

As paddlers, the crew of the bronze ship sit higher than they would in reality, but I suggest that placing them in this manner responds to a formal convention of representation that makes them visible as they are *known*. Their bodies depicted as

⁵ South China provides a number of ancient images of ships, the earliest ones representing coastal and estuary vessels on bronze ritual containers of the Yueh period (Needham 1962: 144, Fig. 300); later ones include model ceramic ships of the Han period tombs (Needham 1971: 445, Figs. 959, 963, and Plate CD). These boats are distinguishable from the canoe and canoe-derivatives of peninsular and Island Southeast Asia by their flat bottoms and square hulls.

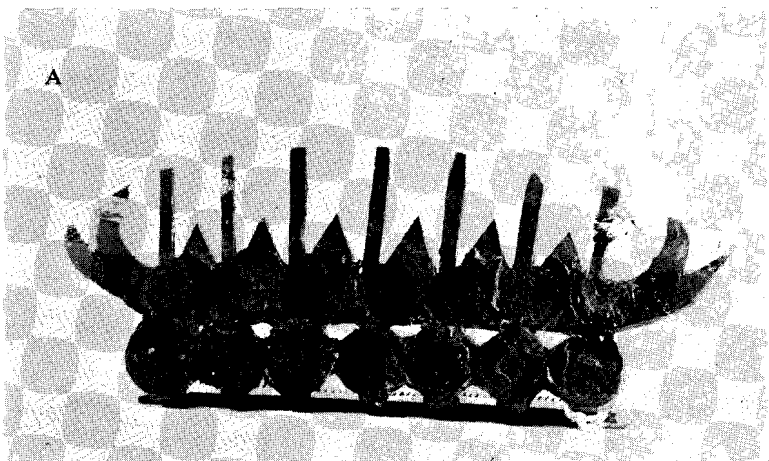


Plate VIIa Horn ornament of ship shape, $8\frac{3}{4}$ " in length and $3\frac{1}{2}$ " in height, attached to flat comb and worn at funeral rites. The ship is represented with bifurcated prow and stern, seven posts and 14 circular impressions in gum, in which silver coins were formerly embedded as a sign of wealth. Collected on Timor, 1969.

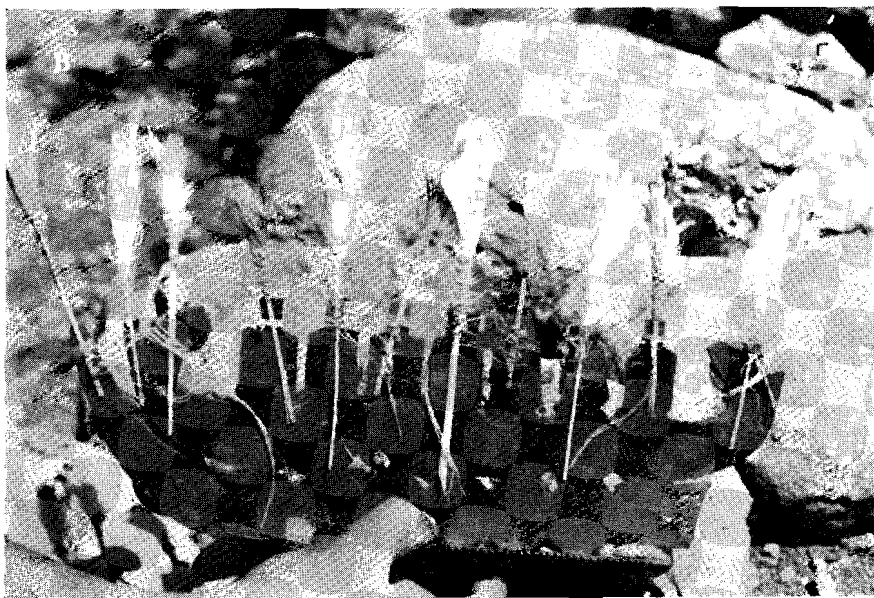


Plate VIIb Ship-shaped ornament of horn. When worn as forehead ornament, it is decorated with colored feathers as banners. Field photograph, Insana village, Timor, 1969.



Plate VIII Ship scene (detail) from the so-called Nelson drum belonging to the Heger I type of the Dong-son tradition. (Goloubew 1940: 404, Figure 15c.)

complete units convince the viewer of their presence and of their identity. We can see examples of this convention in both recent and ancient times in Southeast Asia. For example, in 20th-century Javanese puppetry, passengers in a carriage are shown seated at the windows ledges in a style that manifests no interest in a perspectival record but conveys complete information on passengers in the carriage. Paddlers are presented this way on the ship images of the ancient Heger I drums. In sum, although a bronze ship in three dimensions is a singular kind of object, certain stylistic features can be identified within Southeast Asian visual traditions.

TECHNIQUE

From a technical point of view, there is a problem in determining the casting procedures. The openwork, the overlapping shapes within the ship, and the asymmetries of the figures in the round, such as the warriors who hold weapons at various angles to their bodies, seem to indicate that a procedure such as lost-wax casting was employed, a technique which permits such irregularities of space and masses. If we assume that the entire scene was cast in one piece by the lost-wax technique, the sequence of building up the mould would differ from that described (in note 2) for the bronze weaver figure which is hollow.

The figures on the ship are cast solid but they stand within the spatially open frames of the ship's superstructure. The following general sequence for building up the mould is suggested. First, the center figures were formed in solid wax, that is, the artisan did not start with shaping a clay form. The artisan then laid layers of clay on these figures and built up the clay mass to fit the desired inside contours and interior space of the vessel. This mass was then covered with sheets and rods of wax from which the sides of the ship and the outer rows of seated figures (paddlers) were shaped. The rods of the superstructure and the passengers, fore and aft, made of solid wax, were fixed in place and surrounded with clay. The work in wax determines precisely the form of the ultimate, desired object.

Judging from the four small holes of regular shape on each side of the bronze vessel, four chapelets (small rods of metal) were inserted between the body of the ship and the outer clay investment. After the wax has been melted and removed, these serve to maintain the proper spacing between the two clay masses, the inner core and the outer cover. In casting the piece, the artisan would also have provided a pouring channel and small wax rods (called runners) to facilitate the later passage of the molten metal to various parts of the wax image. The artisan then subjected the entire object to the heating and filling procedures common to lost-wax casting (see note 2). After pouring, the metal-filled mould is left to cool and harden. For the ship both outer and inner clay moulds were removed in order to release the metal-cast object.

However, it is difficult to account for the slight irregular ridges that project from the struts of the ship's superstructure (note Plate VIb-c). Except for their unusual uniformity these resemble the fins that are formed by metal running into the narrow spaces between the parts of a composite, separable mould consisting of a left and a right outer half which fit together over a core in a predetermined and symmetrical shape. During casting these parts are supposed to join snugly, and after cooling they are separated to release the newly formed object. However, if in the course of

casting, the outer two parts of the mould separate slightly (whether intentionally or not), the molten metal would partly fill the space between them and the core, leaving ridges of metal or "fins" along the line of separation. The ridges on the ship's struts resemble these mould-joint fins.

Another reason for believing that a separable piece-mould has been used is the presence of the low-relief herringbone pattern on the hull just behind the bow. This looks very much as if it had been carved in intaglio directly on the mould surface in the manner often done in early Chinese bronzes, which would necessitate the mould's being separable in order to give access to its interior surface. Of course, a combination of methods could have been employed. Wax may have been used to form most of the details in a piece-mould. (I wish to thank Cyril Smith of the Massachusetts Institute of Technology for insightful comments and suggestions on casting procedures. On the basis of photographs, William Samolin of the University of Connecticut [personal communication, 2 January 1972] ventures too that the heavy flashes ["fins"] in the casting suggest piece moulds, at least for certain sections.)

COMPARISON WITH ANCIENT ASIAN SHIP MOTIFS

For a more specific placement of the bronze ship within the history of Southeast Asian art, a comparative review of other known ship representations is a logical next step. In contrast to the paucity of images of weavers, the ship motif has a long history in Southeast Asian art, perhaps the earliest example being a simple canoe containing two figures (see logo for *Asian Perspectives*, volume 13) fired in clay on the cover of a large (30 inch) jar from Palawan, an island between North Borneo and the southern Philippines, recovered from an archaeological site that yielded C-14 dates of 890-710 B.C. (Fox 1968).

Perhaps the best-known representations of ships in Southeast Asia are those on the Heger I type of bronze drums, usually assigned to the Dong-son tradition. Of these the most elaborate and clearly delineated ship scenes appear on several examples of uncertain date collected casually from villages in northern Vietnam and Laos, called the Hoang-ha, Ngoc-Lu, Moulie, and Nelson drums (Goloubew 1940: 404, Fig. 15). On the first two, the ship appears as a crescent-shaped canoe, repeated several times around the upper portion of the drum.⁶ The ship is guided by a steersman managing a curved steering sweep; at midships a single deck castle supports a warrior who is an archer. Other figures on the boats, holding weapons and musical instruments, are interpreted as drummers and dancers. Comparison of these with the Flores figure reveals some shared features: the basic canoe form with upraised bow and stern, the deck castle supporting an armed man, and actively portrayed passengers.

The ship scene on the Nelson drum (Plate VIII) yields similarities to the Flores bronze in the physical arrangement of paddlers and passengers. All thirteen figures on the Nelson ship face the bow, nine of them clearly holding paddles. At midships, like the Flores bronze, there are three standing figures differentiated from the

⁶ Links between canoes and metal drums, evident in the Dong-son visual tradition, appear as well in the oral traditions and ritual of the ethnographic era; for example, the canoe in which the king of Thailand rides in royal festivals carries a bronze drum that is similar to, though simpler in outline than, the Heger I type (see Guehler 1944: 67).

paddlers by standing position, more elaborate dress, and different gestures. All three appear to be taking steps or dancing. Hanging from the waist of the foremost figure are several panels suggesting loincloth ends or a short skirt.

The Flores ship presents its passengers in the round, dispersed in three parallel rows, two outer rows of seated paddlers flanking a center row of the four figures who are making other gestures, three standing in poses suggesting motion (dancing?) (Fig. 4*b*) and one, a seated woman (Fig. 4*c*). We could see the arrangement on the Nelson drum as a linear ordering on a flat surface of the type of scene which appears in three rows in depth on the bronze ship. The Nelson scene in three-dimensional form would have to consist of paddlers on either side of the boat, with the three special figures probably standing in the midst of the canoe. Or to recast the phrasing, if the Flores scene were compressed into two-dimensional form it would consist of seated paddlers interspersed between standing, actively posed figures. Thus allowing for the differences in two-dimensional and three-dimensional representation, there is a resemblance in the kind of scene depicted, a paddled boat bearing distinctive, actively engaged figures.

In spite of general similarities in these ship scenes, one cannot say that the total configuration of the Flores ship resembles the Heger I drum scenes. The number of figures, their costumes, equipment, and poses obviously differ. Specific details also differ markedly. On the drums, the dress of most of the men is not given attention; only an occasional front or back flap suggests that they wear loincloths. However, in the form of vertically arranged feathers (?), their headdresses are strikingly prominent. On the Flores ship, the men who are variously engaged at the ship's terminals wear what seem to be backward-bending caps or turbans; other persons lack apparent headgear. The warrior figures and (less clearly) the three figures standing in the interior wear a short kilt in which thin vertical ridges suggest sections or folded flaps of a loincloth. Another difference is that the mouths of the paddlers on the Flores bronze project like open beaks, suggesting either that they are singing or that they are birdmen.

Even fewer similarities emerge from a comparison of the bronze ship with other representations of ships in the arts of Island and Mainland Southeast Asia. In Indonesia the great monument to the cultural appeal of India's religions and visual style is the terraced stone structure, Borobudur, built as a Buddhist shrine in Central Java in the 9th century A.D. In the pictorial reliefs of the lower galleries, seven scenes include ship images, ranging in form from a large seagoing ship to tiny canoes (van Erp 1923), but these yield no specific resemblances to the Flores canoe.

On the 12th and 13th century monuments of the Khmer period in Cambodia, boats are represented in stone reliefs sixty times, a small proportion of the total number of scenes (Paris 1941). The most detailed and impressive of these occur at Banteay Chmar and on the Bayon structure at Angkor Thom, in reliefs representing the naval battle won by the Khmers over the invading Chams (A.D. 1177). The ships are presented in profile as a type of dugout canoe (that is, hulls are not sewn) whose terminals rise in the form of the head and tail of marine monsters. From the monster's mouth another creature in the form of an elaborate bird, lion, or snake emerges as a high prow. These ship forms are too elaborate to bear comparison with the stark lines of the Flores canoe but there are three features worth considering in relation to the bronze ship.

First, as shown by the ship historian P. Paris (1941), paddled canoes, which comprise half of the ship representations, are used for promenade and parade purposes. The battle scenes illustrate this point. Ships filled with soldiers are rowed by men facing the stern; by rowing in this way, the men can be protected by screens fitted along the sides of the ships. However, boats carrying important persons (princes or admirals) and their attendants are paddled, the crew facing the bow of the ship. Paris interprets the appearance of the royal leader in an unprotected paddled boat as an affirmation of the master's intrepidity.

The second feature concerns a special personage on a canoe in a battle scene at Banteay Chmar, a canoe which can be distinguished from the surrounding warships by the presence of paddlers (facing the bow) and by a raised pavilion or deck castle constructed of thin rods. On this pavilion a giant figure stands holding an extended bow and drawn arrow. He is flanked by groups of attendants and soldiers with insignia, banners, and parasols, who apparently are supported on a raised gangway running the length of the ship between the two files of paddlers. Paris (1941: 339) compares this singular figure on a high platform holding a bow and arrow with the archer on the deck castle of the Dong-son drum scenes. Whether the archers in the two instances can be compared in significance is questionable. It is reasonable however to assume that over a long period of time the visual traditions of Southeast Asia included a representational formula of a paddled canoe characterized by a deck castle supporting an armed figure, the Flores ship of indeterminate date providing yet another example.

The third point of interest is that, as a motif, a woman in a canoe occurs in the Khmer corpus specifically in two small scenes among the stone reliefs of the Bayon monument (Paris 1941: 348, Plate XLVII). These female figures do not resemble in bodily form, pose, dress, or relationship to other figures the seated woman in the bronze ship; however, it is worth noting that the generic motif exists within the classic art of Southeast Asia.

The actively posed warrior figures need not give to the entire bronze-ship scene a meaning of aggressive attack against human enemies. Considering the nature of the passengers, the warriors' poses could be interpreted as defensive positions against dangers of the journey.

IMPORTANCE OF THE SHIP IMAGE IN THE ETHNOGRAPHIC ERA

In the ethnographic era, we are flooded with many ship images in the form of actual and of represented ships. Taking Indonesia as an example, a brief discussion of the cultural framework of ships helps categorize the various types of images and their significance.

In a region made up of many islands spread over 3000 miles, the ship is important as a means of transportation. In truth as well as in myth, the ancestors reached their "destined" islands by ship. In the Indonesian archipelago seafaring is an ancient and important activity. Spice-trade voyages at the time of the Roman Empire may account for the linguistic links between the peoples of Madagascar and Indonesia. Men in ships brought powerful cultural influences in the form of the Hindu and Buddhist religions to Indonesia from India. Buddhism in particular may have encouraged an enrichment of ship symbolism because of its emphasis on pilgrimages

to honored places in India and because of its inclusion of beliefs in an afterworld of splendid luxury and of unceasing prosperity to be reached by ship.

During the historic period of Dutch rule in Indonesia and throughout the ethnographic era, we find that seafaring is a localized occupation. Estuary and offshore fishing is a common skill among coastal groups but the majority of the inhabitants of Indonesian islands are "landlubbers" who meet their survival needs by forming self-sufficient agricultural communities. As a way of life, seafaring belongs only to peoples of certain locations, such as, in eastern Indonesia, the Makassar and the Bugi of southern Sulawesi, and the men of various islands in the Moluccas. Indonesian trade has shown a primary concern with what we would call luxury goods, and all highly valued luxuries come by way of the sea. In spite of the localization of seafaring and the preponderant agricultural concerns, ships play a prominent and deeply significant role in symbolic systems of traditional Indonesian cultures, and this interest is expressed in a great variety of ways and materials.

Social organization and village layout may parallel or conceptually mirror the parts of a ship by being called fore, aft, and midship sections. The mast and sails may give their name to house-parts and leadership roles may be defined by the title of "captain" (Vroklage 1940a; Adams 1970). Such references to ships are frequent on the island of Flores. In Indonesia, important rites are celebrated by going forth in actual ceremonial ships (for ship processions of Javanese princes, see Lombard 1969). This emphasis on ship ritual appears in especially elaborate form in eastern Indonesia, for example, in the famed community-festival ships of the Moluccas, large paddled canoes which are specifically defined as aquatic monsters by carvings at prow and stern. (There is no problem in accepting a technical and visual continuity between these and the large paddled ceremonial canoes of the mainland traditions of the ancient Khmer and of the Thai peoples.)

Ritual patterns reflect ship shapes and their voyages. For example, on Sumba, the building of the royal temple-house is carried out as if a ship were being built and a voyage being made. Processions are paced to rowing songs and the voyage ends with the completion of the temple which represents the arrival of the founding ancestors and the organization of Sumba society (see Adams 1970, 1974; for discussion of ship symbolism in ritual among the peoples of South Sumatra, see Gittinger 1972; for broader Indonesian references, Steinmann 1939-40). Typically social and ritual organization are the product of male leadership and it is my suggestion that in these local rites the ship form represents an image of the community in conceptually masculine terms.

Model ships figure in transition rites as a symbolic mode of moving from one status to another. Schnitger (1939) discusses the decorated wooden ship models used as palanquins in prestige processions in South Sumatra. Tiny model ships belong to a ritual complex of casting away harmful influences which is widespread in Indonesia and beyond to the mainland of Southeast Asia (Archaimbault 1956; Liu 1962; Lowenstein 1958) and the coastal provinces of South China (Eberhard 1968). In this type of ritual, model ships are provided with a crew, passengers, and offerings (often laid within a central pavilion) and set adrift in order to carry away sickness or other threats to normal life.

Another kind of transition rite in which ship images figure is related to beliefs concerning an afterworld, that is, the voyage of the soul to a place of eventual

renewal of life. Symbolically this voyage is aided by customs of providing ship coffins and of placing ship forms on top of burial huts, known on most of the smaller islands of Indonesia (Steinmann 1939-40: 155-159). Another form of the "ship of the dead" can be seen in Kalimantan where the Ngadju paint ships on wooden panels hung at final funeral rites.

That the ship image is important for people living far inland on the larger islands is illustrated by the headdress mentioned earlier, from the interior of Timor island, southeast of Flores (Plate VII). Combined with a comb, this headdress in the shape of a double ship or one with bifurcated ends is worn at death ceremonies.

Ships in ritual are not to be associated only with death and sickness, however, for ship-decorated objects appear in various kinds of rites, such as renewal of fertility, marriage, reconciliation, and temple-building. In these ceremonies, the ship form is associated with precious and expensive objects such as ornaments and decorated textiles, and it is linked explicitly with wealth and prosperity.

Ritual objects imitate ship forms, such as the boat models kept as clan treasure on Sumba, brass bowls of Java and South Sumatra, images on the textile hangings of South Sumatra, and the shape of musical instruments on Sulawesi. Body decorations, whether in tattoos or ornaments of shell, gold, or other metals (for example, the head and chest ornaments of brass from Flores; Vroklage 1940*b*: Plate II) show the double-boat form, thereby recalling the shape of actual Indonesian ships.

Various peoples—including the possessors of the bronze ship from Flores—associate ship forms with the arrival of the ancestors. The importance of the boat as a ritual object would seem to rest on this link with the ancestors' arrival and on the community's desire to commemorate the ancestors and to follow in their path, the imaged rehearsal of the ancestors' initial adventure serving as an appeal for a repetition of their success. As a symbol of the initial success of the ancestors, the ship image has become deeply imbedded in local conceptual systems.

But the enormous variety of forms of ship symbolism among the various island peoples and the frequent equation of the ship image with riches suggest to me that its importance may be reinforced and recharged by a recurrent cargo-cult response to the arrival through the centuries of ships bringing highly valued goods from different distant places.

COMPARISON WITH FORMS OF THE ETHNOGRAPHIC ERA

Although as indicated earlier there are many ship images known from the ethnographic era, it is difficult to find an example fully comparable to the Flores bronze. A single instance can suffice to typify the problem. The ship woven into a South Sumatran textile, illustrated in Wagner (1962), displays a long body with bifurcated prow and a rod-supported platform bearing human passengers. However, differences in shapes, in complexity, in delicate elaboration of detail, and the lack of aggressive attitudes convey sharp contrasts to the bronze ship scene. One clear feature of correspondence between the bronze and real ships of this era lies in the projection of the hull as a long open mouth resembling a crocodile, similar for example to simple dugout canoes from Borneo (see Furness 1902: 78).

Other particular features might furnish clues helpful in identifying the bronze. The costume of the warriors, which seems to consist of a short skirt and a peaked

cap or turban bent backward, does not, however, correspond readily to any currently recognizable Indonesian style of dress. Indonesians wear turbans in myriad forms but this backward curving peaked style is a puzzle. It is repeated with too much regularity to be considered an accidental result of casting. The warriors and the men standing inside the ship display short flaps at the front of their hip wraps, a draping similar to Southeast Asian loincloths in that the ends fold over at the front.

Weapons usually provide firm clues. On Flores and a number of other islands of the region, the round shield was the commonly used type. However, the short oblong shield with a center ridge that appears on the bronze ship resembles the type of shield used by the people of Wetar, a small island not far to the east of Flores (Heine-Geldern 1923: 832, Plate XLII). The weapon which I have referred to as a double-ended axe (Fig. 4a) could be interpreted instead as resembling a short lance such as those held by warriors on Khmer monuments.

The chevron or abstract plant design which appears on both sides of the canoe body is another mark that tells us nothing definite, as this pattern appears on nondatable brass bracelets of eastern Indonesia and in a number of other simple design categories of Southeast Asia.

As a type of composition, tiny human figures distributed in various poses on a larger object can be found in Southeast Asian metalwork especially on bronze lamp forms. Examples assigned to the Dong-son tradition, such as the musician figures in Janse (1936: Plates 1 and 4) and those arranged in scenes dated from the 14th century in East Java, in Bernet Kempers (1959: Plates 307 and 312), present volumetric figures, rounded shapes, and fine detail which separate them in style from the blunt angular forms on the Flores ship. Other works showing this type of composition are the heavy brass cult vessels in the form of offering bowls and kettles said to be made from the early 20th century in Brunei (Huyser 1929-30). The figures of animals and humans display softly curving moulded shapes which contrast in essential character with the Flores ship passengers.

The very process of looking for evidence by which to identify these figures has made two points apparent. Within the greater Southeast Asian region, there are traits shared over great distances and there are remarkable instances of continuity of material culture through great spans of time. The more one stresses the cultural unity of the region, the less able one is to use visual clues to assign these bronze works to a specific location; the more one stresses the continuity of cultural ideas and artifacts through time, the less able one is to assign these works to a specific period.

None of the ship images examined provide by comparison a definitive, specific identification for the bronze ship. They show that the manned dugout with deck castles or raised platforms containing paddlers, warriors, and actively posed passengers is a known theme within Southeast Asian traditions. It is clear too that certain features of the ship such as the open, toothed mouth at the prow belong to a familiar formula in Southeast Asia. The wide range of ship imagery invites further scholarly investigation to define more precisely the character and place of the Flores bronze canoe.

I have provided an introduction to these interesting objects, showing that, in Southeast Asian art, the weaver and mother-and-child are rare motifs, while the manned ship is frequently represented. I have drawn on considerable ethnographic

material to suggest the significance of the two motifs and to indicate that the weaver and the manned canoe can be understood as meaningful motifs within Southeast Asian cultures. This preliminary exposé does not reveal definitive evidence for the origin and dating of these two works. More precise answers require technical analysis and the concerted efforts of a number of scholars interested in Southeast Asian cultural history. I invite comments on any aspect of the problems presented in this paper.

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